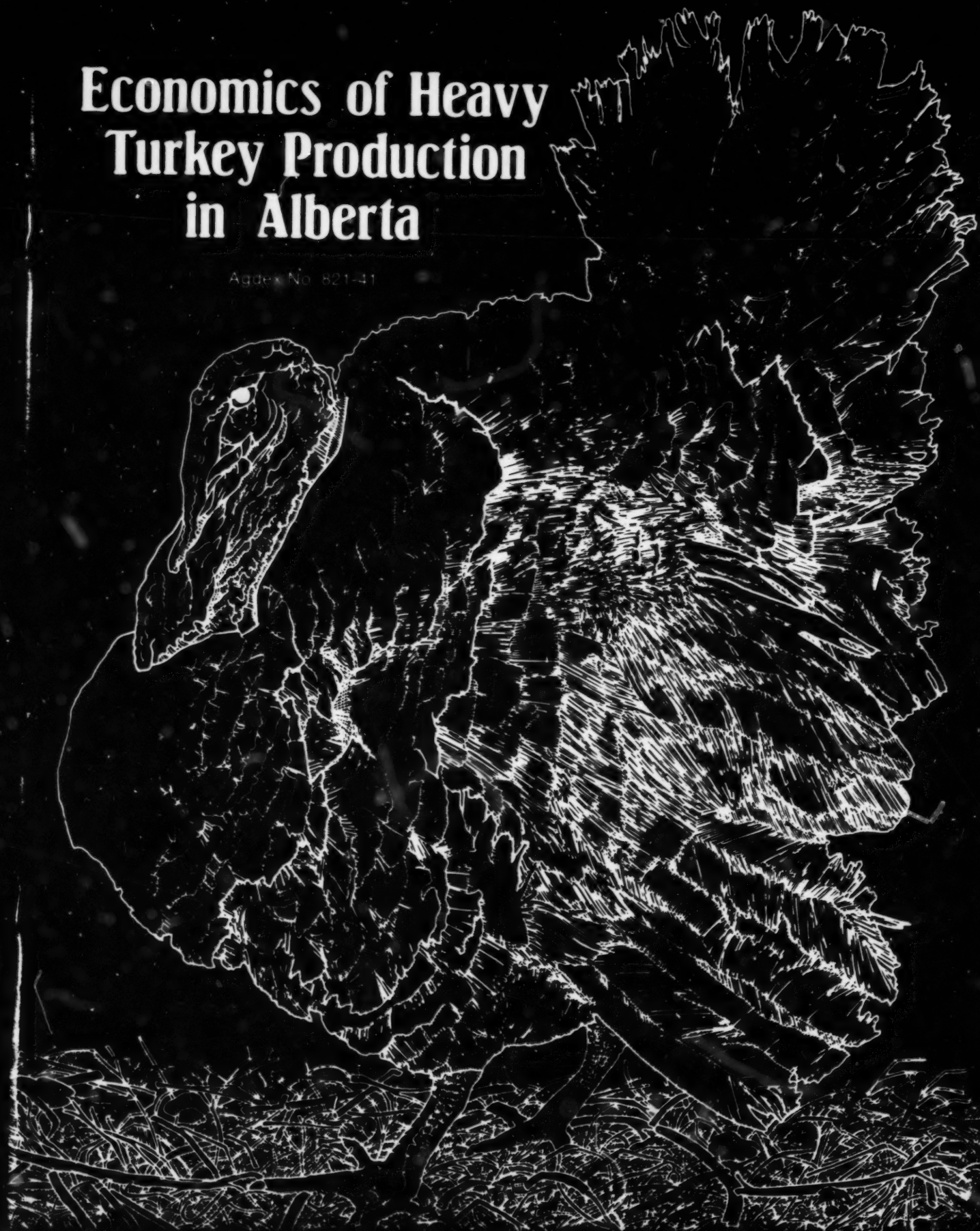


# Economics of Heavy Turkey Production in Alberta

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ECONOMICS OF  
HEAVY TURKEY PRODUCTION  
IN ALBERTA

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## SECTION I

### INTRODUCTION

Turkey production in Canada is presently under supply management. The Canadian Turkey Marketing Agency is the national body that is responsible for establishing national and provincial quotas. The Alberta Turkey Growers' Marketing Board in turn, administers the allocation of provincial quota and also sets the producer price for turkeys raised in Alberta. This producer price and quotas are based on demand-supply relations, producer costs and competing meat products. The Board therefore must be sensitive to changes in the Alberta market and in the turkey industry as a whole.

This three-year study of provincial turkey production returns and costs was initiated in 1984 at the request of the Alberta Turkey Growers' Marketing Board and turkey producers. The Production and Resource Economics Branch which is conducting the study, is responsible for keeping Alberta Agriculture and farm clients informed about up-to-date production returns and costs for all commodities produced within Alberta. The study will report on data collected for the 1983, 1984 and 1985 production years for the heavy and light turkey farming. This report presents data collected on the heavy turkey production for 1983.

The analysis of turkey production returns and costs shows the profit/loss picture of the turkey farm business for the past year. Such findings can help the Board in its dealings at the national level. However, of greater importance, is the provision of benchmarks against which individual producers can compare the performance of their turkey farm to improve productive efficiency and profitability. Results of the three-year study will also enable the farmer to monitor the progress of his enterprise over a period of years.

Specific objectives of the study are as follows:

1. To determine the level of investment associated with heavy turkey production in Alberta;
2. To determine the quantity and cost of different inputs used in heavy turkey production;

3. To provide an account of economic conditions, relative productivity and profitability of heavy turkey production in Alberta;
4. To provide participating producers with an annual summary of their heavy turkey enterprise which could be compared to provincial, regional, and size group averages and used for management decisions; and
5. To provide a source of technical and financial data for Alberta Agriculture field staff for use in extension education.

## SECTION II

### METHOD OF ANALYSIS AND SURVEY

The approach used to examine the cost of heavy turkey production was one which summarized all of the income produced by the enterprises for a one year period, less all of the expenses, losses and depreciation for the period studied. The residual is expressed as a return to equity or owned portion of investment. Such an accrual statement gives a profit picture of the operation for the 1983 fiscal year, a year being the usual accounting period considered. The accrual method is more advantageous for analyzing a farm business for management purposes, whereas, the cash method is more useful for analyzing the business for tax purposes and cash flows.

The definition of income in this report includes all products sold as well as those products still on hand as year-end inventory. The amount of inventory may vary from one period to the next, and may be negative or positive depending on the relative magnitudes of the opening and closing inventory.

Production costs are separated into variable and capital costs. By definition, variable costs change as the level of output changes. The variable costs include such items as feed, labour, medication and other operating expenses. Although the value of family labour is imputed, it is a real expense. Capital costs represent the cost of resource ownership. These resources are fixed in quantity and include such costs as rent, taxes, insurance, depreciation and interest on capital loans.

The difference between income and total production costs is a measure of performance of the business. This residual is the return to management and owner equity; it should be sufficient to provide for living expenses, debt repayment and future investment. The difference between income and the sum of variable costs, taxes and insurances represents the debt repayment capacity.

Farmers can compare their economic and financial performance to averages derived from the cross section of farms surveyed. They can

evaluate profitability, liquidity, solvency and the financial status of their turkey farm.

Fourteen heavy turkey producers provided detailed financial and physical data about their enterprises. The data were gathered primarily through individual farm visits in 1984 and by follow-up telephone calls and mail. The questionnaire requested complete records of assets, liabilities, physical production, prices, and the amounts of inputs used and the associated expenses.

Approximately 46 producers held registered heavy turkey quotas with the Alberta Turkey Growers' Marketing Board during the 1983 production year. The 14 randomly selected participants in this study represented over 30 per cent of the total number of producers. A comparison of the sample distribution with the provincial population by region and by quota size is given below.

TABLE 1

DISTRIBUTION OF SAMPLE, ALBERTA, 1983

| Region/Quota       | Province |         | Sample |         |
|--------------------|----------|---------|--------|---------|
|                    | Number   | Percent | Number | Percent |
| Lethbridge area    | 10       | 21.7    | 3      | 21.4    |
| Calgary area       | 8        | 17.4    | 5      | 35.7    |
| Edmonton area      | 28       | 60.9    | 6      | 42.9    |
| Total              | 46       | 100     | 14     | 100     |
| <100,000 kg        | 15       | 32.6    | 3      | 21.4    |
| 100,000-200,000 kg | 21       | 45.7    | 6      | 42.9    |
| >200,000 kg        | 10       | 21.7    | 5      | 35.7    |
| Total              | 46       | 100     | 14     | 100     |

The stratified random sample was used to obtain a cross-section of the producers by quota size and region. All study participants received a detailed analysis of their turkey farming operation, and group averages by region and quota size.

### SECTION III

#### ANALYSIS OF RESULTS

##### Investment And Enterprise Size

The results from the 1983 study indicated that the average number of years farming experience in producing heavy turkeys was 14. Regionally, experience varied from 11 years in the Calgary area to 14 and 17 years, respectively, in the Lethbridge and Edmonton areas. The amount of experience also increased with size of enterprise from 11 years on farms with less than 100,000 kilograms of quota to 19 years on farms with over 200,000 kilograms of quota (Table 2).

Average investment in turkey production was approximately \$199,393 per farm or 84 cents per kilogram sold (\$8.33 per bird). Buildings averaging 12 years of age, comprised nearly 74 per cent of the total market value. Machinery represented 19 per cent of the investment and averaged seven years of age. The remaining seven per cent of investment consisted of land and supplies. Owner equity was estimated at nearly 91 per cent of the total market value of the assets associated with the turkey enterprise.

Regionally, the Calgary area reported the highest investment averaging \$332,579 per farm or \$1.34 per kilogram sold (\$12.97 per bird). However, in spite of this very high capitalization, equity in this region was also higher than elsewhere at 97 per cent. Buildings were nine years old and machinery six years. The Edmonton area had the lowest market value of assets and the oldest facilities. Investment in the Edmonton area was valued at nearly \$113,041 per farm or 41 cents per kilogram sold (\$5.15 per bird). Buildings were 14 years old and machinery nine years old. Equity in the Edmonton region was lower than the provincial average, at 80 per cent. Participants in the Lethbridge area invested on average \$121,338 per farm or 75 cents per kilogram sold (\$5.88 per bird). Buildings and machinery were 12 and five years old, respectively. Equity was estimated at only 79 per cent of total investment.

TABLE 2

## HEAVY TURKEY PRODUCTION IN ALBERTA, 1983

| Region/Size<br>Class | Years<br>Experience | Invest.<br>\$ Per<br>Kg Bird | No. Birds<br>Sold | Average<br>Weight/Bird<br>(Kg) | Grade A  |       | Days To Market |          | Mortality |  | Feed<br>Conversion |
|----------------------|---------------------|------------------------------|-------------------|--------------------------------|----------|-------|----------------|----------|-----------|--|--------------------|
|                      |                     |                              |                   |                                | Per Cent | Hens  | Toms           | Per Cent |           |  |                    |
| Regions              |                     |                              |                   |                                |          |       |                |          |           |  |                    |
| 1. Lethbridge        | 14                  | 0.76                         | 5.88              | 20334                          | 7.88     | 60.99 | 118.3          | 134.4    | 10        |  | 2.88               |
| 2. Calgary           | 11                  | 1.34                         | 12.97             | 28560                          | 8.69     | 72.28 | 119.6          | 142.0    | 20        |  | 3.52               |
| 3. Edmonton          | 17                  | 0.41                         | 5.15              | 29014                          | 9.40     | 75.62 | 123.9          | 139.6    | 19        |  | 3.10               |
| Size Class           |                     |                              |                   |                                |          |       |                |          |           |  |                    |
| <100,000 kg          | 11                  | 0.84                         | 8.58              | 10459                          | 9.06     | 59.49 | 116.9          | 131.5    | 9         |  | 3.0                |
| 100,000-200,000 kg   | 12                  | 0.91                         | 8.16              | 19485                          | 8.63     | 72.01 | 120.6          | 139.6    | 12        |  | 3.27               |
| >200,000 kg          | 19                  | 0.80                         | 8.40              | 50145                          | 8.94     | 77.98 | 122.3          | 141.1    | 23        |  | 3.28               |
| Total                | 14                  | 0.84                         | 8.33              | 26836                          | 8.84     | 70.96 | 121.2          | 139.6    | 18        |  | 3.21               |

As the size of enterprise increased, total investment per farm also increased from \$79,617 on farms with quota of less than 100,000 kilograms to \$359,153 on farms with quota exceeding 200,000 kilograms. However, the investment per kilogram sold was highest, 91 cents, on farms with 100,000 to 200,000 kilograms quota as against 80 cents on farms with more than 200,000 kilograms of quota (Table 2). The age of facilities increased with size of enterprise from 10 years for buildings and five years for machinery on the smallest farms to 14 years and 10 years, respectively, on the largest farms.

#### Summary Of Production

In 1983, the average heavy turkey participant sold 26,836 birds, each bird sold averaging about 8.84 kilograms in weight (Table 2). As one moved north across the province, the average size of operation increased from 20,334 birds sold per farm in Lethbridge to 29,014 birds sold per farm in Edmonton. Participants in the Calgary area reported sales of approximately 28,560 birds per farm. Production also increased with quota size from 10,459 birds sold per farm on the smallest size operations to 50,145 birds per farm on the largest farms. Those farms with 100,000 to 200,000 kilograms quota sold about 19,485 birds per farm in 1983. The average weight of the birds varied between 8.6 and 9.1 kilograms per bird.

The average grade A per cent for heavy turkey producers was almost 71 per cent (Table 2). Reported grade A percentage varied from 61 per cent in the Lethbridge region to almost 76 per cent in the Edmonton area. However, the grade A per cent was significantly lower on the smallest size farms, 59 per cent, compared to 78 per cent on the largest farms.

On average, it took 121 days to produce hens of market weight and 140 days for toms. Regionally, the average days to market for hens increased from 118 days in the Lethbridge area to 124 days in the Edmonton area; the average days to market for toms ranged from 134 days in Lethbridge to 142 days in Calgary. Generally, the average days to market increased with the size of enterprise from 117 days for hens and 132 days for toms on the smallest farms to 122 days for hens and 141 days for toms on the largest farms.

The mortality rate is a direct measure of lost production. Mortality rates were relatively high averaging 18 per cent in the province as a whole (Table 2). The southern region reported the lowest losses of 10 per cent, while Calgary and Edmonton reported losses of 19 to 20 per cent. As the size of enterprise increased losses also increased from nine per cent on the smallest farms to 23 per cent on the largest farms.

An average feed conversion of 3.21 kilograms of feed per kilogram of turkey sold was reported for the province as a whole (Table 2). The Lethbridge region reported the best feed conversion of 2.88 kilograms of feed per kilogram of turkey sold, whereas the Calgary area reported a high feed conversion of 3.52. High feed conversions were also reported by large and intermediate size farms, 3.27 to 3.28 kilograms of feed per kilogram of turkey sold, compared to the smallest enterprises which used only 3.0 kilograms of feed per kilogram of turkey sold.

#### Gross Income

For the purposes of this study, gross income included all sales of birds reported through the marketing board, any private sales, gifts, home use, other receipts and a dollar value for inventory adjustment. The sales information was obtained directly from producer records. In 1983, the average gross income resulting from the sale of 26,836 birds per farm or 237,377 kilograms of turkey was \$337,418.56 or \$12.57 per bird. The average income per kilogram sold was therefore \$1.42.

Moving from southern to northern Alberta, the total number of birds sold rose from 20,334 per farm in the Lethbridge area to 29,014 birds in the Edmonton area. Accordingly, the total gross income rose from \$219,573 per farm in the Lethbridge area to \$385,342 per farm in the Edmonton area (Table 3). Gross income per bird was also higher in Edmonton, \$13.28 compared to \$10.80 and \$12.61 per bird in Lethbridge and Calgary regions, respectively. However, because of different market weights, gross income per kilogram sold was highest in the Calgary area, \$1.45 versus \$1.41 and \$1.37 in Edmonton and Lethbridge, respectively.

TABLE 3

SUMMARY OF RETURNS AND COSTS FOR HEAVY TURKEY  
PRODUCTION BY REGION, ALBERTA, 1983

|                               | Regions    |         |          | Alberta |
|-------------------------------|------------|---------|----------|---------|
|                               | Lethbridge | Calgary | Edmonton |         |
| No. of Birds Sold             | 20334      | 28560   | 29014    | 26836   |
| Gross Income (\$/Bird)        | 10.80      | 12.61   | 13.28    | 12.57   |
| Gross Income (¢/Kg)           | 136.96     | 145.17  | 141.22   | 142.14  |
| - - - - - Cents/Kg. - - - - - |            |         |          |         |
| Feed Cost                     | 82.02      | 80.83   | 85.98    | 83.30   |
| Poult Cost                    | 17.60      | 16.93   | 15.43    | 16.37   |
| Labour                        | 8.69       | 9.56    | 7.29     | 8.42    |
| Other Cash                    | 11.09      | 17.37   | 17.67    | 16.52   |
| Total Variable                | 119.40     | 124.69  | 126.37   | 124.61  |
| Capital Costs                 | 7.95       | 11.53   | 5.76     | 8.42    |
| Total Production Costs        | 127.34     | 136.23  | 132.13   | 133.03  |
| Gross Margin                  | 17.56      | 20.47   | 14.85    | 17.53   |
| Return to Equity              | 9.62       | 8.94    | 9.09     | 9.11    |
| - - - - - Per Cent - - - - -  |            |         |          |         |
| Return to Equity              | 16.07      | 6.86    | 27.37    | 11.93   |
| Return on Investment          | 14.80      | 6.97    | 24.46    | 11.88   |

TABLE 4

SUMMARY OF RETURNS AND COST FOR HEAVY TURKEY  
PRODUCTION BY SIZE, ALBERTA, 1983

|                              | Kilograms Quota (000's) |         |        | Alberta |
|------------------------------|-------------------------|---------|--------|---------|
|                              | <100                    | 100-200 | >200   |         |
| No. of Birds Sold            | 10459                   | 19485   | 50145  | 26836   |
| Gross Income (\$/Bird)       | 11.98                   | 12.10   | 12.94  | 12.57   |
| Gross Income (¢/Kg)          | 132.33                  | 140.23  | 144.78 | 142.14  |
| - - - - - Cents/Kg - - - - - |                         |         |        |         |
| Feed Cost                    | 83.86                   | 82.89   | 83.43  | 83.30   |
| Poult Cost                   | 15.02                   | 15.84   | 16.88  | 16.37   |
| Labour                       | 6.01                    | 8.47    | 8.78   | 8.42    |
| Other Cash                   | 13.20                   | 12.49   | 1.74   | 16.52   |
| Total Variable               | 118.09                  | 119.69  | 128.13 | 124.61  |
| Capital Costs                | 9.02                    | 9.41    | 7.77   | 8.42    |
| Total Production Costs       | 127.11                  | 129.10  | 136.18 | 133.03  |
| Gross Margin                 | 14.24                   | 20.54   | 16.37  | 17.53   |
| Return to Equity             | 5.22                    | 11.13   | 8.59   | 9.11    |
| - - - - - Per Cent - - - - - |                         |         |        |         |
| Return to Equity             | 7.72                    | 15.41   | 10.73  | 11.93   |
| Return on Investment         | 8.32                    | 14.63   | 10.73  | 11.88   |

The increased income per bird seemed to be directly related to the grade A per cent and the sale of heavier birds. Edmonton area producers recorded an average sale weight of 9.4 kilograms per bird sold and grade A utilization of 76 per cent compared with, say Lethbridge area producers who sold their birds at an average weight of 7.9 kilograms per bird and a grade A utilization of 61 per cent.

As the size of enterprise increased, total gross income as well as income per bird and grade A per cent utilization also increased. Gross income per farm increased five-fold from \$125,353 on farms with less than 100,000 kilograms of quota, to \$649,053 on farms with more than 200,000 kilograms of quota.

The smallest turkey farms reported average income of \$11.98 per bird sold with grade A utilization of only 59.5 per cent versus \$12.94 per bird and grade A utilization of nearly 78 per cent for the largest farms. Producers with quota of 100,000 to 200,000 kilograms reported income of \$12.10 per bird sold and grade A utilization of 72 per cent. On a weight basis, income per kilogram sold significantly increased with size of operation from \$1.32 on the smallest turkey farms to almost \$1.45 on the largest farms.

## Expenses

### Feed Costs

Feed was the major cost factor in turkey production representing nearly 67 per cent of the variable costs and almost 63 per cent of the total production cost. The feed costs reflected the cost of all the feed actually used. Home-grown grain was valued at market price, while the actual purchase price was applied to purchased feed. The total feed cost in 1983 was 83.3 cents per kilogram of turkey sold. Feed costs accounted for almost 59 per cent of the blend turkey price.

Across the province, feed cost was highest in the Edmonton area, 86 cents per kilogram, compared to 81 to 82 cents in the other two regions (Table 3). However, when quota size was considered, average feed cost

was similar for the three size classes at about 83 to 84 cents per kilogram sold (Table 4).

#### Poult Cost

The average cost of purchasing poults in 1983, amounted to 16.4 cents per kilogram sold or \$1.45 per bird sold. Poult cost was lower in the Edmonton area, 15.4 cents per kilogram sold, compared to 16.9 and 17.6 cents in Calgary and Lethbridge, respectively (Table 3). Poult cost significantly increased with size of enterprise from 15.0 cents per kilogram on the smallest size enterprises to almost 17 cents per kilogram on the largest (Table 4). It is recalled that the largest class of farms reported the highest mortality of 23 per cent.

#### Labour

Labour hours involved in the turkey enterprise were recorded for operator, family and hired labour. The hired wage rate was the actual wage paid. Operator wage rate was set at \$7.00 per hour, while family labour rates varied depending on type of work performed.

The average turkey enterprise in 1983 required 2,732 hours of productive man units or about 1.09 man equivalents. Almost 1,710 hours or 62.6 per cent of the labour was provided by hired help. The operator and family contributed the remaining 1,022 hours. Labour accounted for about seven per cent of the variable cost and six per cent of the total production cost. On average, it took 1.15 hours to produce 100 kilograms of meat or 0.11 hour per bird. Accordingly, labour cost was 8.4 cents per kilogram sold or 74 cents per bird.

Regionally, the Calgary area farms utilized the greatest amount of labour averaging 3,261 hours per farm, followed by Edmonton and Lethbridge regions with 2,512 and 2,217 hours per farm, respectively. Hired labour accounted for roughly 37 per cent of the total labour used by Lethbridge area farms, and 64 and 74 per cent of the total labour used on farms in the Calgary and Edmonton regions, respectively. Total labour productivity was highest in Edmonton, 1.0 hour per 100 kilograms

of turkey sold, in contrast to 1.3 and 1.4 hours in Calgary and Lethbridge, respectively. Edmonton also reported the lowest labour cost of 7.3 cents per kilogram sold versus 8.7 and 9.6 cents, respectively, in Lethbridge and Calgary.

Roughly seven per cent of the total variable and total production costs in the Lethbridge region was attributed to labour. In the case of Calgary, eight per cent of the variable cost and seven per cent of the total cost were due to labour. Six per cent of variable cost and 5.5 per cent of total cost were attributed to labour in the Edmonton region.

Total labour requirements increased with the size of farm, from 901 hours per farm with less than 100,000 kilograms of quota to 2,205 and 4,895 hours, respectively, on farms with 100,000 to 200,000 kilograms and more than 200,000 kilograms of quota. Hired help contributed over 89 per cent of the labour on the largest farms, and 54 and 33 per cent, respectively, on the small and intermediate size farms. Labour productivity seemed unrelated to quota size varying from a high of 1.0 hour per 100 kilograms on the smallest farms, to 1.1 and 1.3 hours, respectively, on the large and intermediate size farms. However, because of the increasing amount of hired labour used as farms increase in size, labour cost was highest on the largest farms, 8.8 cents per kilogram compared to 6.0 cents on the small farms.

#### Other Cash Costs

The other cash costs incurred by a turkey enterprise included such expenses as medication, barn supplies, marketing fees and freight, fuel, oil and lubrication, utilities, machinery and building repairs, operating interest and other miscellaneous items, e.g., accounting and professional fees. In 1983, other cash cost averaged 16.5 cents per kilogram sold or \$1.46 per bird sold. Other cash cost represented over 13 per cent of variable costs and 12 per cent of total production cost (Table 3).

Regionally, other cash costs noticeably increased from 11.1 cents per kilogram sold in the Lethbridge area to 17.4 and 17.7 cents per kilogram in the Calgary and Edmonton areas, respectively. It contributed about nine per cent to the variable and total production cost in the

Lethbridge area, and about 13 to 14 per cent in the Calgary and Edmonton areas.

Other cash varied from 12.5 cents per kilogram (\$1.08 per bird) sold by the intermediate size farms to 19.1 cents per kilogram (\$1.74 per bird) on the largest farms. Other cash costs comprised 15 per cent of the variable cost and 14 per cent of the total production costs on the largest farms, while accounting for only 10 to 11 per cent of the variable and total production costs on the intermediate and smaller farms.

### Capital Costs

Capital costs included all costs associated with resource ownership, such as insurance, taxes, rent, depreciation and actual interest paid on capital loans. Depreciation was calculated using original or purchase cost and the straight line method, with depreciation rates of 10 per cent for machinery and five per cent for buildings. The estimated capital cost for 1983 was 8.4 cents per kilogram sold or 75 cents per bird. Over six per cent of total production cost was attributed to capital costs.

Across the province, capital cost varied from 5.8 cents per kilogram (54 cents per bird) sold in the Edmonton area to 8 cents and 11.5 cents per kilogram in the Lethbridge and Calgary areas, respectively. The capital costs of 7.8 cents per kilogram (69 cents per bird) sold by the larger turkey farms was lower than that of the intermediate and smaller size farms, which reported capital costs of just over 9 cents per kilogram (81 to 82 cents per bird). The lower capital costs on large farms was a direct consequence of the very favourable equity position of these producers.

### Total Cost

Total cost is the sum of all variable and capital cost. Lethbridge area farms had the lowest production cost of \$1.27 per kilogram sold (\$10.04 per bird) which was seven per cent below that of Calgary and four per cent below Edmonton costs (Table 3). As Edmonton area farms produced a heavier bird than Calgary, cost per bird was five per cent higher in Edmonton than in Calgary. Cost per kilogram sold also increased with the

size of operation, ranging from \$1.27 on the smallest turkey farms to \$1.36 on the largest farms. The average cost for the province as a whole was \$1.33 per kilogram sold or \$11.77 per bird (Table 4).

### Gross Margin

Gross margin in this report is defined as the residual after variable costs are deducted from gross income. This residual indicates what is left over for payment of capital costs, reinvestment and management. It follows, therefore, that if a farm is to remain in business particularly during the short term, it must have a positive gross margin, i.e. income must exceed variable costs.

Each region and each size class recorded a positive gross margins. The estimated gross margin for 1983 was \$41,624 per farm or 17.6 cents per kilogram sold (\$1.55 per bird). Gross margins ranged from 14.9 cents per kilogram (\$1.40 per bird) in the Edmonton area to 20.5 cents per kilogram (\$1.78 per bird) in the Calgary area (Table 3). Considering quota sizes, gross margins varied from a low of 14.2 cents per kilogram (\$1.29 per bird) on the smallest turkey farms to 20.5 cents (\$1.77 per bird) on farms with 100,000 to 200,000 kilograms of quota (Table 4).

### Return to Equity

Return to equity or net income, the difference between gross income and total production cost, indicates profitability, the amount of money that is available for reinvestment and management. It is that surplus which can be drawn from the turkey enterprise without reducing the future scale of the enterprise. In 1983, the average turkey farm reported returns to equity of 9.1 cents per kilogram or 81 cents per bird sold. Return to equity of 9.6 cents per kilogram sold was highest in the Lethbridge region, compared to 8.9 and 9.1 cents per kilogram in the Calgary and Edmonton areas, respectively. However, on a bird basis, average return to equity was highest in the Edmonton area, 85 cents per

bird sold, followed by Calgary area farms with 78 cents per bird sold and then Lethbridge at 76 cents per bird sold.

Return to equity was highest on those turkey farms which had quotas of 100,000 to 200,000 kilograms. The average return was 11.1 cents per kilogram or 96 cents per bird as against 5.2 cents per kilogram (47 cents per bird) on the smallest farms.

Regionally, profit as a percentage of sales varied between six and seven per cent in 1983. On a quota basis, the intermediate size farms reported profits of eight per cent versus four per cent for the small farms and six per cent on the large farms. The provincial average was 6.4 per cent.

#### Return on Investment and Equity

The rate of return on investment and owner equity are also good indicators of profitability. These returns should be comparable to those of alternative investments. Turkey farms in the Edmonton area recorded the highest rate of return on investment. This area reported a 24.5 per cent return on investment in contrast to returns of 14.8 per cent and seven per cent in Lethbridge and Calgary areas, respectively. The intermediate size farms reported the highest return on investment of 14.6 per cent followed by the largest turkey farms with 10.7 per cent and the small farms with 8.3 per cent (Table 3).

The rates of return to owner equity followed the same pattern as those of investment, with turkey farms in the Edmonton area and those farms with 100,000 to 200,000 kilograms of quota showing the highest returns of 27.4 per cent and 15.4 per cent, respectively (Table 4). Rates of return to equity were lowest on farms in the Calgary area, 6.9 per cent, and on those farms with less than 100,000 kilograms of quota, 7.7 per cent. On the whole, in 1983, turkey farms in Alberta earned returns on investment and equity of almost 12 per cent.

## Debt Repayment Capacity

The maximum amount of debt which the turkey farm can service depends on the amount of retained earnings, prior fixed commitments for these retained earnings, the rate of interest and the terms of the loan. When interest rates rise and when repayment periods are reduced, more retained earnings are needed for debt servicing. The earnings retained for debt servicing are given by the gross return minus insurance and taxes, i.e. 16.1 cents per kilogram or \$1.43 per bird. Taking this provincial average, and assuming an interest rate of 12 per cent and a repayment period of 15 years, the debt repayment capacity of the typical turkey farm in 1983 was \$1.10 per kilogram of quota or \$9.74 per bird. The total debt repayment capacity for the farm was \$260,665 (Table 5). In other words, all things remaining equal, the farm could generate \$260,665 of income to cover rent, depreciation, principal and interest payments for any additional assets acquired.

It should be emphasized that the debt servicing capacity depends on the income generating potential of the turkey enterprise and also the terms of financing available from the lender. The more favourable the financial arrangements the greater will be the financial feasibility. Similarly, increased productivity, reduced costs, reduced withdrawals for family living expenses, and increased profitability will all serve to increase the debt carrying capacity of the farm. Therefore care should be exercised in making farm to farm comparisons.

TABLE 5

### ESTIMATE OF DEBT REPAYMENT CAPACITY FOR TURKEY PRODUCTION, ALBERTA, 1983

| Interest Rates |      | Per Kilogram | Average Debt Load<br>Per Bird | Per Farm |
|----------------|------|--------------|-------------------------------|----------|
| Per            | Cent | Dollars      |                               |          |
| 10             |      | 1.22         | 10.88                         | 291,099  |
| 11             |      | 1.16         | 10.28                         | 275,209  |
| 12             |      | 1.10         | 9.74                          | 260,665  |
| 13             |      | 1.04         | 9.24                          | 247,328  |
| 14             |      | 0.99         | 8.78                          | 235,073  |
| 15             |      | 0.94         | 8.36                          | 223,791  |

## SECTION IV

### EVALUATION OF MANAGEMENT

#### Management Factors

Profitability is dependent on the efficiency of production and marketing practices. By making the right decisions regarding production and marketing, farm profits can be greatly enhanced. To assist producers in improving their operations, the sample farms were divided into three management classes High, Medium and Low based on five management factors. The five factors were as follows:

1. Grade A utilization
2. Cost per bird
3. Return to operator and family labour
4. Return per dollar feed cost
5. Return per dollar of investment

The grade A per cent is taken to be a measure of product quality. The other factors describe the efficiency of feed, labour, capital and overall input use.

The breakdown was designed to give producers the opportunity to compare their farm performance with other managers. Turkey farms which performed above average in all five factors were categorized as the High management group. Those which performed below average in four or all five factors were categorized as the Low management group. The remainder fell into Medium management group. The distribution of the farms is shown in Table 6.

Table 6:

## DISTRIBUTION OF PARTICIPANTS BY MANAGEMENT CLASS, ALBERTA, 1983

| Management Class | Number of Participants | Per cent of Sample |
|------------------|------------------------|--------------------|
| High             | 4                      | 28.6               |
| Medium           | 6                      | 42.8               |
| Low              | 4                      | 28.6               |
| Total            | 14                     | 100                |

## Management Results

Contrary to expectations, turkey farms in the High management group were significantly smaller than those in the Medium and Low management classes. They sold only 18,607 birds per farm which was 31 per cent below the provincial average. The birds marketed weighed about 9.1 kilograms compared to 9.3 and 7.6 kilograms for the Medium and Low management farms, respectively. Total investment averaged \$81,817 per farm or 48.5 cents per kilogram (\$4.40 per bird) and was slightly less than one-third of the total investment reported by the other management groups (Appendix A).

Owner equity was fairly similar across management groups varying between 89 per cent on the Low management farms and 94 per cent on Medium management farms. However, the High and Medium management farmers had between 15 and 18 years of turkey farming experience in contrast to three years for the Low management farms.

Grade A utilization on High management farms was seven percentage points above the Medium management group and four percentage points above the Low management group. Although labour use was somewhat similar across management groups ranging from a low of 1.2 hours per 100 kilograms on Medium management farms to 1.0 hours on Low management farms, labour cost was lower on High management farms, \$7.45 per kilogram compared to \$8.33 and \$9.00 on Medium and Low management farms. Most

TABLE 7:

SUMMARY OF RETURNS AND COSTS FOR TURKEY PRODUCTION  
BY MANAGEMENT CLASS, ALBERTA, 1983

|                        | Management                   |        |        | Total  |
|------------------------|------------------------------|--------|--------|--------|
|                        | High                         | Medium | Low    |        |
| No. of Birds Sold      | 18607                        | 31959  | 27562  | 26836  |
| Gross Income (\$/Bird) | 12.85                        | 12.96  | 11.44  | 12.57  |
| Gross Income (¢/Kg)    | 141.68                       | 139.52 | 150.05 | 142.14 |
|                        | - - - - - Cents/Kg - - - - - |        |        |        |
| Feed Cost              | 80.91                        | 78.93  | 98.19  | 83.30  |
| Poult Cost             | 15.35                        | 15.92  | 18.70  | 16.37  |
| Labour                 | 7.45                         | 8.33   | 9.72   | 8.42   |
| Other Cash             | 15.26                        | 15.16  | 21.74  | 16.52  |
| Total Variable         | 118.97                       | 118.34 | 148.35 | 124.61 |
| Capital Costs          | 8.42                         | 5.74   | 9.21   | 9.08   |
| Total Production Costs | 124.71                       | 127.55 | 157.43 | 133.03 |
| Gross Margin           | 22.71                        | 21.18  | 1.70   | 17.53  |
| Return to Equity       | 16.97                        | 11.97  | -7.38  | 9.11   |
|                        | - - - - - Per Cent - - - - - |        |        |        |
| Return to Equity       | 38.14                        | 15.90  | -6.50  | 11.93  |
| Return on Investment   | 36.10                        | 15.40  | 5.40   | 11.88  |

important, mortality was substantially lower on High management farms, 11.1 per cent in contrast to 17.9 and 25.4 per cent, on Medium and Low management farms, respectively.

Cost per kilogram of \$1.25 (\$11.31 per bird) on High management farms was two per cent below the Medium management group and 21 per cent below the Low management group. Farmers in the Low management group reported gross income of \$1.50 per kilogram (\$11.44 per bird) versus \$1.40 (\$12.96 per bird) and \$1.42 (\$12.85 per bird) in the Medium and High management groups, respectively. However, the gross margin, i.e., the return over variable costs, reached 22.7 cents per kilogram in the High management group compared with only 1.7 cents per kilogram reported by the Low management operations (Table 7).

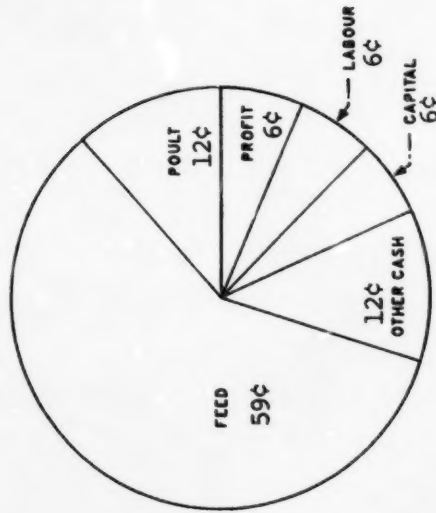
Only the High and Medium management farms showed profits in 1983. On average, the return to equity or net income on High management farms was 17 cents per kilogram (\$1.54 per bird), and 12 cents (\$1.11 per bird) on Medium management farms. Low management farms experienced losses of 7.4 cents per kilogram (56 cents per bird) due primarily to higher death-losses and significantly higher operating costs.

The average rate of return to equity on High management farms of 38.1 per cent was more than double that of the Medium management farms at 15.9 per cent. Similarly, the rate of return on investment greatly exceeded those of the Medium and Low management farms. The rate of return on investment was 36.1 per cent on High management farms versus 15.4 and 5.4 per cent on Medium and Low management farms, respectively. High management farms had profits from sales of almost 12 per cent compared to 8.6 per cent on Medium management farms.

Graphs 1a and 1b indicate the proportion of one income dollar allocated to expenses for the province as a whole and the top management producers. For one dollar of income received in 1983 by heavy turkey producers, 59 cents was spent on feed, roughly 11.5 cents each on poults and other cash costs, 6 cents each for labour and capital costs, leaving just over 6 cents as profit. High management farms had proportionately less expenses, resulting in a higher profit of 12 cents. For more details on management performance see Appendix B.

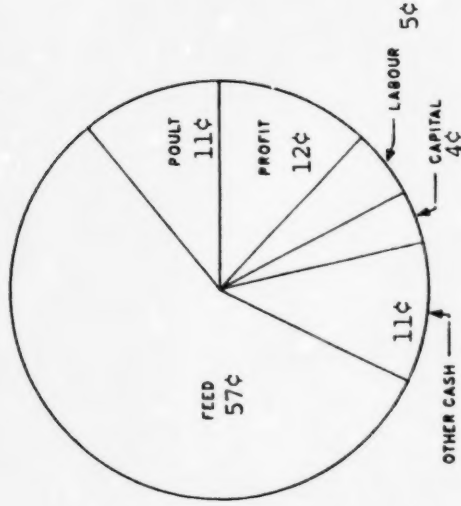
# HEAVY TURKEY PRODUCTION

DIVISION OF INCOME DOLLAR  
PROVINCIAL AVERAGE



Graph 1a.

DIVISION OF INCOME DOLLAR  
HIGH MANAGEMENT



Graph 1b.

## SECTION V

### PROVINCIAL PERSPECTIVE

In 1983, 10,675,301 turkey poults were placed for heavy weight production in Canada. Of this total, 48 per cent were placed in Ontario, 17 per cent in Quebec, 10 per cent in Alberta, nine per cent in Manitoba and British Columbia, five per cent in Saskatchewan and the remaining two per cent in the Atlantic provinces.

Prices for hen turkey ranged from 133.5 cents per kilogram in Montreal to 145.3 cents per kilogram in Vancouver. The average price for hens in Edmonton was 141.6 cents, while Toronto reported an average price of 135.8 cents per kilogram.

Prices for toms ranged from 139.0 cents per kilogram in Winnipeg to 144.8 cents in Vancouver. Edmonton reported an average tom price of 143.7 cents per kilogram and Toronto was 143.3 cents per kilogram (Table 8).

The following table presents the 1983 December consolidated cost of production for Ontario, Quebec, Manitoba and British Columbia. Alberta costs were not available. The costs are segregated by feed, poult, labour, other variable and fixed overhead costs. These costs are not directly comparable to the Alberta results given in this report, because the Alberta provincial results portray the actual situation and do not use as many imputed values as the consolidated costs. Care should therefore be taken in comparing these estimates with Alberta results presented in this report. The consolidated costs are prepared by the Canadian Turkey Marketing Agency.

TABLE 8:

**CONSOLIDATED TURKEY COST OF PRODUCTION AND PRICES  
FOR SELECTED PROVINCES, 1983**

|                      | Provinces                        |        |          |        |
|----------------------|----------------------------------|--------|----------|--------|
|                      | Ontario                          | Quebec | Manitoba | B.C.   |
|                      | - - - - - Cents Per Kg - - - - - |        |          |        |
| Feed                 | 85.09                            | 106.53 | 89.87    | 95.24  |
| Poult                | 15.43                            | 15.43  | 15.00    | 15.59  |
| Labour               | 8.96                             | 8.44   | 8.80     | 11.76  |
| Other Variable       | 12.96                            | 13.25  | 13.31    | 13.61  |
| Fixed Overhead       | 17.91                            | 17.58  | 18.09    | 19.04  |
| C.O.P.               | 140.37                           | 161.23 | 145.07   | 155.24 |
| Ungraded live Prices |                                  |        |          |        |
| Hen                  | 146.30                           | 141.50 | 141.90   | 146.00 |
| Tom                  | 149.15                           | 146.50 | 144.50   | 148.50 |

Source: Canadian Turkey Marketing Agency, Brampton, Ontario.



## APPENDIX A



## PROVINCIAL AVERAGE

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG |
|--------------------------------|-----------------|-----------|---------------------|-----------------|
| -----                          |                 |           |                     |                 |
| BIRD SALES                     | 26836.07 BIRDS  |           |                     |                 |
| HENS                           |                 | 166467 81 | 6 20                | 70 13           |
| TOMS                           |                 | 168303 19 | 6 27                | 70 90           |
| PRIVATE SALES & OTHER RECEIPTS |                 | 916 17    | 0 03                | 0 39            |
| INVENTORY ADJUSTMENT           |                 | 1731 54   | 0 06                | 0 73            |
| -----                          |                 |           |                     |                 |
| A. GROSS INCOME                |                 | 337418 56 | 12 57               | 142 14          |
|                                |                 |           |                     |                 |
| POULT COSTS - HENS             | 1 19 \$/POULT   | 25734 32  | 0 96                | 10 84           |
| - TOMS                         | 1 26 \$/POULT   | 13118 37  | 0 49                | 5 53            |
| FEED COSTS - HENS              | 264 76 \$/TONNE | 114002 50 | 4 25                | 48 03           |
| - TOMS                         | 234 76 \$/TONNE | 83722 81  | 3 12                | 35 27           |
| MEDICATION                     |                 | 892 65    | 0 03                | 0 38            |
| BARN SUPPLIES                  |                 | 2401 10   | 0 09                | 1 01            |
| MARKETING FEES & FREIGHT       |                 | 9170 03   | 0 34                | 3 86            |
| FUEL, OIL, LUBE                |                 | 1247 89   | 0 05                | 0 53            |
| UTILITIES                      |                 | 10649 30  | 0 40                | 4 49            |
| MACHINERY & BUILDING REPAIRS   |                 | 5667 54   | 0 21                | 2 39            |
| OPERATING INTEREST             |                 | 3470 08   | 0 13                | 1 46            |
| OTHER EXPENSES                 |                 | 5727 40   | 0 21                | 2 41            |
|                                |                 |           |                     |                 |
| HIRED LABOUR                   | 1708 85 HOURS   | 13669 95  | 0 51                | 5 76            |
| FAMILY LABOUR                  | 1022 15 HOURS   | 6321 07   | 0 24                | 2 66            |
| -----                          |                 |           |                     |                 |
| LABOUR COSTS                   | 7 32 \$/HOUR    | 19991 02  | 0 74                | 8 42            |
|                                |                 |           |                     |                 |
| B. TOTAL VARIABLE COSTS        |                 | 295795 00 | 11 02               | 124 61          |
|                                |                 |           |                     |                 |
| INSURANCE AND TAXES            |                 | 3351 81   | 0 12                | 1 41            |
| RENT                           |                 | 25 96     |                     | 0 01            |
| DEPRECIATION                   |                 | 14548 89  | 0 54                | 6 13            |
| INTEREST (CAPITAL LOANS)       | 11 45 %         | 2069 36   | 0 08                | 0 87            |
| -----                          |                 |           |                     |                 |
| C. TOTAL CAPITAL COSTS         |                 | 19996 02  | 0 75                | 8 42            |
|                                |                 |           |                     |                 |
| D. PRODUCTION COSTS (B+C)      |                 | 315790 87 | 11 77               | 133 03          |
| GROSS MARGIN (A-B)             |                 | 41623 61  | 1 55                | 17 53           |
| RETURN TO EQUITY (A-D)         | 11 93 %         | 21627 59  | 0 81                | 9 11            |
|                                |                 |           |                     |                 |
| INVESTMENT:                    |                 |           |                     |                 |
| -----                          |                 |           |                     |                 |
| BUILDINGS                      | 11 69 YEARS     | 147774 44 | 5 51                | 62 25           |
| MACHINERY                      | 6 97 YEARS      | 38747 48  | 1 44                | 16 32           |
| LAND & SUPPLIES                |                 | 12870 96  | 0 48                | 5 42            |
| -----                          |                 |           |                     |                 |
| TOTAL INVESTMENT               |                 | 199392 81 | 7 43                | 84 00           |
| EQUITY                         | 90 93 %         | 181316 50 | 6 76                | 76 38           |
|                                |                 |           |                     |                 |
| MANAGEMENT:                    |                 |           |                     |                 |
| -----                          |                 |           |                     |                 |
| YEARS OF TRKY FARMING          | 13 77           |           |                     |                 |
| NUMBER OF FLOCKS               | 3 31            |           |                     |                 |
| TOTAL KG SOLD                  | 237377 12       |           |                     |                 |
| GRADE & UTILIZATION            | 70 96 %         |           |                     |                 |
| ANNUAL PRODUCTIVITY            | 25330 38 BIRDS  |           |                     |                 |
| HOURS PER BIRD                 | 0 11            |           |                     |                 |
| FEED CONVERSION FACTOR         | 3 21            |           |                     |                 |
| INVESTMENT PER BIRD            | 8 33            |           |                     |                 |
| MORTALITY ESTIMATE             | 18 07 %         |           |                     |                 |
| PERCENTAGE CONDEMNED           | 2 01 %          |           |                     |                 |
| DAYS TO MARKET - HENS          | 121 18          |           |                     |                 |
| - TOMS                         | 139 64          |           |                     |                 |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG |
|--------------------------------|-----------------|-----------|---------------------|-----------------|
| BIRD SALES                     | 20333 66 BIRDS  |           |                     |                 |
| HENS                           |                 | 171755 94 | 8 45                | 107 13          |
| TOMS                           |                 | 46510 33  | 2 29                | 29 01           |
| PRIVATE SALES & OTHER RECEIPTS |                 |           |                     |                 |
| INVENTORY ADJUSTMENT           |                 | 1306 78   | 0 06                | 0 82            |
| A GROSS INCOME                 |                 | 219573 06 | 10 80               | 136 96          |
| POULT COSTS - HENS             | 1 18 \$/POULT   | 20965 91  | 1 03                | 13 08           |
| - TOMS                         | 1 30 \$/POULT   | 7249 77   | 0 36                | 4 52            |
| FEED COSTS - HENS              | 296 90 \$/TONNE | 104629 75 | 5 15                | 65 26           |
| - TOMS                         | 267 48 \$/TONNE | 26867 48  | 1 32                | 16 76           |
| MEDICATION                     |                 | 418 41    | 0 02                | 0 26            |
| BARN SUPPLIES                  |                 | 450 33    | 0 02                | 0 25            |
| MARKETING FEES & FREIGHT       |                 | 4630 09   | 0 23                | 2 89            |
| FUEL, OIL, LUBE                |                 | 1503 98   | 0 07                | 0 94            |
| UTILITIES                      |                 | 6688 05   | 0 33                | 4 16            |
| MACHINERY & BUILDING REPAIRS   |                 | 2483 49   | 0 12                | 1 55            |
| OPERATING INTEREST             |                 | 132 49    | 0 01                | 0 08            |
| OTHER EXPENSES                 |                 | 1483 14   | 0 07                | 0 93            |
| Hired Labour                   | 817 33 HOURS    | 5633 66   | 0 28                | 3 51            |
| FAMILY Labour                  | 1400 00 HOURS   | 8300 00   | 0 41                | 5 18            |
| LABOUR COSTS                   | 6 28 \$/HOUR    | 13933 66  | 0 69                | 8 69            |
| B TOTAL VARIABLE COSTS         |                 | 191416 44 | 9 41                | 119 40          |
| INSURANCE AND TAXES            |                 | 2584 01   | 0 13                | 1 61            |
| RENT                           |                 |           |                     |                 |
| DEPRECIATION                   |                 | 7615 64   | 0 37                | 4 75            |
| INTEREST (CAPITAL LOANS)       | 10.00 %         | 2540 63   | 0 12                | 1 58            |
| C TOTAL CAPITAL COSTS          |                 | 12740 28  | 0 63                | 7 95            |
| D PRODUCTION COSTS (B+C)       |                 | 204156 69 | 10 04               | 127 34          |
| GROSS MARGIN (A-B)             |                 | 28156 62  | 1 38                | 17 56           |
| RETURN TO EQUITY (A-D)         | 16 07 %         | 15416 37  | 0 76                | 9 62            |
| INVESTMENT:                    |                 |           |                     |                 |
| BUILDINGS                      | 12 48 YEARS     | 86432 87  | 4 25                | 53 91           |
| MACHINERY                      | 5 49 YEARS      | 20921 52  | 1 03                | 13 05           |
| LAND & SUPPLIES                |                 | 13983 18  | 0 69                | 8 72            |
| TOTAL INVESTMENT               |                 | 121337 50 | 5 97                | 75 68           |
| EQUITY                         | 79 06 %         | 95931 19  | 4 72                | 59 84           |
| MANAGEMENT:                    |                 |           |                     |                 |
| YEARS OF TRKY FARMING          | 14 00           |           |                     |                 |
| NUMBER OF FLOCKS               | 2 33            |           |                     |                 |
| TOTAL KG SOLD                  | 160319 62       |           |                     |                 |
| GRADE & UTILIZATION            | 60 99 %         |           |                     |                 |
| ANNUAL PRODUCTIVITY            | 19197 33 BIRDS  |           |                     |                 |
| HOURS PER BIRD                 | 0 12            |           |                     |                 |
| FEED CONVERSION FACTOR         | 2 88            |           |                     |                 |
| INVESTMENT PER BIRD            | 5 88            |           |                     |                 |
| MORTALITY ESTIMATE             | 9 76 %          |           |                     |                 |
| PERCENTAGE CONDEMNED           | 0 87 %          |           |                     |                 |
| DAYS TO MARKET - HENS          | 118 30          |           |                     |                 |
| - TOMS                         | 134 39          |           |                     |                 |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG |
|--------------------------------|-----------------|-----------|---------------------|-----------------|
| BIRD SALES                     | 28559.80 BIRDS  |           |                     |                 |
| HENS                           |                 | 168912.69 | 5.91                | 68.07           |
| TOMS                           |                 | 186960.62 | 6.55                | 75.35           |
| PRIVATE SALES & OTHER RECEIPTS |                 | 1661.43   | 0.06                | 0.67            |
| INVENTORY ADJUSTMENT           |                 | 2668.00   | 0.09                | 1.08            |
| A. GROSS INCOME                |                 | 360202.56 | 12.61               | 145.17          |
| POULT COSTS - HENS             | 1.19 \$/POULT   | 22796.61  | 0.80                | 9.19            |
| - TOMS                         | 1.22 \$/POULT   | 19184.71  | 0.67                | 7.74            |
| FEED COSTS - HENS              | 249.71 \$/TONNE | 139183.56 | 4.87                | 56.09           |
| - TOMS                         | 199.72 \$/TONNE | 61397.55  | 2.15                | 24.74           |
| MEDICATION                     |                 | 1499.11   | 0.05                | 0.60            |
| BARN SUPPLIES                  |                 | 2156.46   | 0.08                | 0.87            |
| MARKETING FEES & FREIGHT       |                 | 10233.05  | 0.36                | 4.12            |
| FUEL, OIL, LUBE                |                 | 1436.14   | 0.05                | 0.58            |
| UTILITIES                      |                 | 10231.82  | 0.36                | 4.12            |
| MACHINERY & BUILDING REPAIRS   |                 | 6033.64   | 0.21                | 2.43            |
| OPERATING INTEREST             |                 | 4501.61   | 0.16                | 1.81            |
| OTHER EXPENSES                 |                 | 7009.87   | 0.25                | 2.83            |
| HIRED LABOUR                   | 2093.00 HOURS   | 16292.31  | 0.57                | 6.57            |
| FAMILY LABOUR                  | 1168.20 HOURS   | 7440.00   | 0.26                | 3.00            |
| LABOUR COSTS                   | 7.28 \$/HOUR    | 23732.31  | 0.83                | 9.56            |
| B. TOTAL VARIABLE COSTS        |                 | 309406.19 | 10.83               | 124.69          |
| INSURANCE AND TAXES            |                 | 3725.82   | 0.13                | 1.50            |
| RENT                           |                 |           |                     |                 |
| DEPRECIATION                   |                 | 23883.87  | 0.84                | 9.63            |
| INTEREST (CAPITAL LOANS)       | 10.80 %         | 1008.80   | 0.04                | 0.41            |
| C. TOTAL CAPITAL COSTS         |                 | 28618.48  | 1.00                | 11.53           |
| D. PRODUCTION COSTS (B+C)      |                 | 338024.56 | 11.84               | 136.23          |
| GROSS MARGIN (A-B)             |                 | 50796.35  | 1.78                | 20.47           |
| RETURN TO EQUITY (A-D)         | 6.86 %          | 22177.89  | 0.78                | 8.94            |
| INVESTMENT:                    |                 |           |                     |                 |
| BUILDINGS                      | 9.00 YEARS      | 266380.19 | 9.33                | 107.35          |
| MACHINERY                      | 5.83 YEARS      | 51488.50  | 1.80                | 20.75           |
| LAND & SUPPLIES                |                 | 14710.00  | 0.52                | 5.93            |
| TOTAL INVESTMENT               |                 | 332578.56 | 11.64               | 134.03          |
| EQUITY                         | 97.19 %         | 323238.56 | 11.32               | 130.27          |
| MANAGEMENT:                    |                 |           |                     |                 |
| YEARS OF TRKY FARMING          | 10.60           |           |                     |                 |
| NUMBER OF FLOCKS               | 3.20            |           |                     |                 |
| TOTAL KG SOLD                  | 248131.00       |           |                     |                 |
| GRADE A UTILIZATION            | 72.28 %         |           |                     |                 |
| ANNUAL PRODUCTIVITY            | 26239.80 BIRDS  |           |                     |                 |
| HOURS PER BIRD                 | 0.12            |           |                     |                 |
| FEED CONVERSION FACTOR         | 3.52            |           |                     |                 |
| INVESTMENT PER BIRD            | 12.97           |           |                     |                 |
| MORTALITY ESTIMATE             | 20.36 %         |           |                     |                 |
| PERCENTAGE CONDEMNED           | 2.03 %          |           |                     |                 |
| DAYS TO MARKET - HENS          | 119.55          |           |                     |                 |
| - TOMS                         | 141.98          |           |                     |                 |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG. |
|--------------------------------|-----------------|-----------|---------------------|------------------|
| BIRD SALES                     | 29013.80 BIRDS  |           |                     |                  |
| HENS                           |                 | 160850.06 | 5.54                | 58.95            |
| TOMS                           |                 | 222721.56 | 7.68                | 81.63            |
| PRIVATE SALES & OTHER RECEIPTS |                 | 720.60    | 0.02                | 0.26             |
| INVENTORY ADJUSTMENT           |                 | 1049.95   | 0.04                | 0.38             |
| A. GROSS INCOME                |                 | 385342.19 | 13.28               | 141.22           |
| POULT COSTS - HENS             | 1.19 \$/POULT   | 31533.10  | 1.09                | 11.56            |
| TOMS                           | 1.32 \$/POULT   | 10563.20  | 0.36                | 3.87             |
| FEED COSTS - HENS              | 269.31 \$/TONNE | 94445.50  | 3.26                | 34.61            |
| TOMS                           | 250.48 \$/TONNE | 140161.44 | 4.83                | 51.37            |
| MEDICATION                     |                 | 570.73    | 0.02                | 0.21             |
| BARN SUPPLIES                  |                 | 3816.20   | 0.13                | 1.40             |
| MARKETING FEES & FREIGHT       |                 | 10830.98  | 0.37                | 3.97             |
| FUEL, OIL, LUBE                |                 | 906.00    | 0.03                | 0.33             |
| UTILITIES                      |                 | 13455.54  | 0.46                | 4.93             |
| MACHINERY & BUILDING REPAIRS   |                 | 7211.88   | 0.25                | 2.64             |
| OPERATING INTEREST             |                 | 4441.11   | 0.15                | 1.63             |
| OTHER EXPENSES                 |                 | 6991.49   | 0.24                | 2.56             |
| HIRED LABOUR                   | 1862.22 HOURS   | 15869.26  | 0.55                | 5.82             |
| FAMILY LABOUR                  | 649.40 HOURS    | 4014.80   | 0.14                | 1.47             |
| LABOUR COSTS                   | 7.92 \$/HOUR    | 19884.15  | 0.69                | 7.29             |
| B. TOTAL VARIABLE COSTS        |                 | 344811.00 | 11.88               | 126.37           |
| INSURANCE AND TAXES            |                 | 3438.49   | 0.12                | 1.26             |
| RENT                           |                 | 67.50     | 0.00                | 0.02             |
| DEPRECIATION                   |                 | 9373.88   | 0.32                | 3.44             |
| INTEREST (CAPITAL LOANS)       | 12.70 %         | 2847.16   | 0.10                | 1.04             |
| C. TOTAL CAPITAL COSTS         |                 | 15727.02  | 0.54                | 5.76             |
| D. PRODUCTION COSTS (B+C)      |                 | 360538.00 | 12.43               | 132.13           |
| GROSS MARGIN (A-B)             |                 | 40531.05  | 1.40                | 14.85            |
| RETURN TO EQUITY (A-D)         | 27.37 %         | 24804.04  | 0.85                | 9.09             |
| INVESTMENT:                    |                 |           |                     |                  |
| BUILDINGS                      | 13.91 YEARS     | 65973.94  | 2.27                | 24.18            |
| MACHINERY                      | 9.01 YEARS      | 36702.06  | 1.26                | 13.45            |
| LAND & SUPPLIES                |                 | 10364.60  | 0.36                | 3.80             |
| TOTAL INVESTMENT               |                 | 113040.62 | 3.90                | 41.43            |
| EQUITY                         | 80.17 %         | 90625.62  | 3.12                | 33.21            |
| MANAGEMENT:                    |                 |           |                     |                  |
| YEARS OF TRKY FARMING          | 16.80           |           |                     |                  |
| NUMBER OF FLOCKS               | 4.00            |           |                     |                  |
| TOTAL KG SOLD                  | 272857.75       |           |                     |                  |
| GRADE A UTILIZATION            | 75.62 %         |           |                     |                  |
| ANNUAL PRODUCTIVITY            | 28100.80 BIRDS  |           |                     |                  |
| HOURS PER BIRD                 | 0.09            |           |                     |                  |
| FEED CONVERSION FACTOR         | 3.10            |           |                     |                  |
| INVESTMENT PER BIRD            | 5.15            |           |                     |                  |
| MORTALITY ESTIMATE             | 19.33 %         |           |                     |                  |
| PERCENTAGE CONDEMNED           | 2.45 %          |           |                     |                  |
| DAYS TO MARKET - HENS          | 123.88          |           |                     |                  |
| - TOMS                         | 139.60          |           |                     |                  |

## LESS THAN 100,000 kg.

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG |
|--------------------------------|-----------------|-----------|---------------------|-----------------|
| BIRD SALES                     | 10459.33 BIRDS  |           |                     |                 |
| HENS                           |                 | 68674.62  | 6.57                | 72.50           |
| TOMS                           |                 | 56634.75  | 5.41                | 59.79           |
| PRIVATE SALES & OTHER RECEIPTS |                 | 43.33     | 0.00                | 0.05            |
| INVENTORY ADJUSTMENT           |                 |           |                     |                 |
| A. GROSS INCOME                |                 | 125352.75 | 11.98               | 132.33          |
| POULT COSTS - HENS             | 1.18 \$/POULT   | 6058.77   | 0.58                | 6.40            |
| - TOMS                         | 1.30 \$/POULT   | 8169.77   | 0.78                | 8.62            |
| FEED COSTS - HENS              | 280.68 \$/TONNE | 46468.37  | 4.44                | 49.06           |
| - TOMS                         | 271.32 \$/TONNE | 32969.16  | 3.15                | 34.80           |
| MEDICATION                     |                 | 38.41     | 0.00                | 0.04            |
| BARN SUPPLIES                  |                 | 317.00    | 0.03                | 0.33            |
| MARKETING FEES & FREIGHT       |                 | 2808.68   | 0.27                | 2.97            |
| FUEL, OIL, LUBE                |                 | 526.63    | 0.05                | 0.56            |
| UTILITIES                      |                 | 4689.89   | 0.45                | 4.95            |
| MACHINERY & BUILDING REPAIRS   |                 | 1725.16   | 0.16                | 1.82            |
| OPERATING INTEREST             |                 | 265.02    | 0.03                | 0.28            |
| OTHER EXPENSES                 |                 | 2134.56   | 0.20                | 2.25            |
| HIRED LABOUR                   | 484.00 HOURS    | 2967.00   | 0.28                | 3.13            |
| FAMILY LABOUR                  | 417.00 HOURS    | 2724.00   | 0.26                | 2.88            |
| LABOUR COSTS                   | 6.32 \$/HOUR    | 5691.00   | 0.54                | 6.01            |
| B. TOTAL VARIABLE COSTS        |                 | 111862.31 | 10.69               | 118.09          |
| INSURANCE AND TAXES            |                 | 1248.61   | 0.12                | 1.32            |
| RENT                           |                 |           |                     |                 |
| DEPRECIATION                   |                 | 5614.47   | 0.54                | 5.93            |
| INTEREST (CAPITAL LOANS)       | 10.80 %         | 1681.33   | 0.16                | 1.77            |
| C. TOTAL CAPITAL COSTS         |                 | 8544.41   | 0.82                | 9.02            |
| D. PRODUCTION COSTS (B+C)      |                 | 120406.69 | 11.51               | 127.11          |
| GROSS MARGIN (A-B)             |                 | 13490.44  | 1.29                | 14.24           |
| RETURN TO EQUITY (A-D)         | 7.72 %          | 4946.06   | 0.47                | 5.22            |
| INVESTMENT:                    |                 |           |                     |                 |
| BUILDINGS                      | 9.95 YEARS      | 52315.10  | 5.00                | 55.23           |
| MACHINERY                      | 5.14 YEARS      | 21090.77  | 2.02                | 22.26           |
| LAND & SUPPLIES                |                 | 6210.66   | 0.59                | 6.56            |
| TOTAL INVESTMENT               |                 | 79616.50  | 7.61                | 84.05           |
| EQUITY                         | 80.45 %         | 64049.83  | 6.12                | 67.62           |
| MANAGEMENT:                    |                 |           |                     |                 |
| YEARS OF TRKY FARMING          | 11.33           |           |                     |                 |
| NUMBER OF FLOCKS               | 2.33            |           |                     |                 |
| TOTAL KG SOLD                  | 94726.62        |           |                     |                 |
| GRADE A UTILIZATION            | 59.49 %         |           |                     |                 |
| ANNUAL PRODUCTIVITY            | 10459.33 BIRDS  |           |                     |                 |
| HOURS PER BIRD                 | 0.09            |           |                     |                 |
| FEED CONVERSION FACTOR         | 3.00            |           |                     |                 |
| INVESTMENT PER BIRD            | 8.58            |           |                     |                 |
| MORTALITY ESTIMATE             | 9.30 %          |           |                     |                 |
| PERCENTAGE CONDEMNED           | 0.98 %          |           |                     |                 |
| DAYS TO MARKET - HENS          | 116.95          |           |                     |                 |
| - TOMS                         | 131.80          |           |                     |                 |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG. |
|--------------------------------|-----------------|-----------|---------------------|------------------|
| BIRD SALES                     | 19485.00 BIRDS  |           |                     |                  |
| HENS                           |                 | 137340.00 | 7.05                | 81.71            |
| TOMS                           |                 | 95739.06  | 4.91                | 56.96            |
| PRIVATE SALES & OTHER RECEIPTS |                 | 1963.36   | 0.10                | 1.17             |
| INVENTORY ADJUSTMENT           |                 | 653.39    | 0.03                | 0.39             |
| A. GROSS INCOME                |                 | 235695.62 | 12.10               | 140.23           |
| POULT COSTS - HENS             | 1.17 \$/POULT   | 18511.29  | 0.95                | 11.01            |
| - TOMS                         | 1.25 \$/POULT   | 8122.71   | 0.42                | 4.83             |
| FEED COSTS - HENS              | 271.99 \$/TONNE | 83467.94  | 4.28                | 49.66            |
| - TOMS                         | 250.00 \$/TONNE | 55857.69  | 2.87                | 33.23            |
| MEDICATION                     |                 | 724.55    | 0.04                | 0.43             |
| BARN SUPPLIES                  |                 | 1530.21   | 0.08                | 0.91             |
| MARKETING FEES & FREIGHT       |                 | 6640.28   | 0.34                | 3.95             |
| FUEL OIL, LUBE                 |                 | 1153.17   | 0.06                | 0.69             |
| UTILITIES                      |                 | 3975.49   | 0.20                | 2.37             |
| MACHINERY & BUILDING REPAIRS   |                 | 2185.23   | 0.11                | 1.30             |
| OPERATING INTEREST             |                 | 2650.83   | 0.14                | 1.58             |
| OTHER EXPENSES                 |                 | 2113.53   | 0.11                | 1.26             |
| Hired Labour                   | 546.58 HOURS    | 4022.95   | 0.21                | 2.39             |
| FAMILY Labour                  | 1658.67 HOURS   | 10213.16  | 0.52                | 6.08             |
| LABOUR COSTS                   | 6.46 \$/HOUR    | 14236.11  | 0.73                | 8.47             |
| B. TOTAL VARIABLE COSTS        |                 | 201172.81 | 10.32               | 119.69           |
| INSURANCE AND TAXES            |                 | 2044.45   | 0.10                | 1.22             |
| RENT                           |                 | 56.25     | 0.00                | 0.03             |
| DEPRECIATION                   |                 | 10076.13  | 0.52                | 5.99             |
| INTEREST (CAPITAL LOANS)       | 11.61 %         | 3642.95   | 0.19                | 2.17             |
| C. TOTAL CAPITAL COSTS         |                 | 15819.77  | 0.81                | 9.41             |
| D. PRODUCTION COSTS (B+C)      |                 | 216992.62 | 11.14               | 129.10           |
| GROSS MARGIN (A-B)             |                 | 34522.84  | 1.77                | 20.54            |
| RETURN TO EQUITY (A-D)         | 15.41 %         | 18703.07  | 0.96                | 11.13            |
| INVESTMENT:                    |                 |           |                     |                  |
| BUILDINGS                      | 11.26 YEARS     | 110540.44 | 5.67                | 65.77            |
| MACHINERY                      | 6.12 YEARS      | 32773.98  | 1.68                | 19.50            |
| LAND & SUPPLIES                |                 | 9460.09   | 0.49                | 5.63             |
| TOTAL INVESTMENT               |                 | 152774.50 | 7.84                | 90.89            |
| EQUITY                         | 79.46 %         | 121392.19 | 6.23                | 72.22            |
| MANAGEMENT:                    |                 |           |                     |                  |
| YEARS OF TRKY FARMING          | 11.67           |           |                     |                  |
| NUMBER OF FLOCKS               | 2.17            |           |                     |                  |
| TOTAL KG SOLD                  | 168078.81       |           |                     |                  |
| GRADE A UTILIZATION            | 72.01 %         |           |                     |                  |
| ANNUAL PRODUCTIVITY            | 18916.83 BIRDS  |           |                     |                  |
| HOURS PER BIRD                 | 0.12            |           |                     |                  |
| FEED CONVERSION FACTOR         | 3.27            |           |                     |                  |
| INVESTMENT PER BIRD            | 8.16            |           |                     |                  |
| MORTALITY ESTIMATE             | 11.73 %         |           |                     |                  |
| PERCENTAGE CONDEMNED           | 2.06            |           |                     |                  |
| DAYS TO MARKET - HENS          | 120.56          |           |                     |                  |
| - TOMS                         | 139.58          |           |                     |                  |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG. |
|--------------------------------|-----------------|-----------|---------------------|------------------|
| BIRD SALES                     | 50145.25 BIRDS  |           |                     |                  |
| HENS                           |                 | 283504.50 | 5.65                | 63.24            |
| TOMS                           |                 | 360901.00 | 7.20                | 80.50            |
| PRIVATE SALES & OTHER RECEIPTS |                 |           |                     |                  |
| INVENTORY ADJUSTMENT           |                 | 4647.43   | 0.09                | 1.04             |
| A. GROSS INCOME                |                 | 649052.50 | 12.94               | 144.78           |
| POULT COSTS - HENS             | 1.20 \$/POULT   | 51325.55  | 1.02                | 11.45            |
| POULT COSTS - TOMS             | 1.25 \$/POULT   | 24323.31  | 0.49                | 5.43             |
| FEED COSTS - HENS              | 258.26 \$/TONNE | 210455.50 | 4.20                | 48.94            |
| FEED COSTS - TOMS              | 223.24 \$/TONNE | 163585.94 | 3.25                | 36.49            |
| MEDICATION                     |                 | 1785.47   | 0.04                | 0.40             |
| BARN SUPPLIES                  |                 | 5270.50   | 0.11                | 1.18             |
| MARKETING FEES & FREIGHT       |                 | 17735.67  | 0.35                | 3.96             |
| FUEL, OIL, LUBE                |                 | 1930.93   | 0.04                | 0.43             |
| UTILITIES                      |                 | 25123.59  | 0.50                | 5.60             |
| MACHINERY & BUILDING REPAIRS   |                 | 13847.80  | 0.28                | 3.09             |
| OPERATING INTEREST             |                 | 7102.75   | 0.14                | 1.58             |
| OTHER EXPENSES                 |                 | 13842.84  | 0.28                | 3.09             |
| HIRED LABOUR                   | 4374.15 HOURS   | 36167.66  | 0.72                | 8.07             |
| FAMILY LABOUR                  | 521.25 HOURS    | 3180.75   | 0.06                | 0.71             |
| LABOUR COSTS                   | 8.04 \$/HOUR    | 39348.41  | 0.78                | 8.78             |
| B. TOTAL VARIABLE COSTS        |                 | 575677.75 | 11.48               | 128.41           |
| INSURANCE AND TAXES            |                 | 6890.25   | 0.14                | 1.54             |
| RENT                           |                 |           |                     |                  |
| DEPRECIATION                   |                 | 27958.87  | 0.56                | 6.24             |
| INTEREST (CAPITAL LOANS)       | %               |           |                     |                  |
| C. TOTAL CAPITAL COSTS         |                 | 34849.11  | 0.69                | 7.77             |
| D. PRODUCTION COSTS (B+C)      |                 | 610526.75 | 12.18               | 136.18           |
| GROSS MARGIN (A-B)             |                 | 73374.62  | 1.46                | 16.37            |
| RETURN TO EQUITY (A-D)         | 10.73 %         | 38525.53  | 0.77                | 8.59             |
| INVESTMENT:                    |                 |           |                     |                  |
| BUILDINGS                      | 13.65 YEARS     | 275220.50 | 5.49                | 61.39            |
| MACHINERY                      | 9.63 YEARS      | 60950.28  | 1.22                | 13.60            |
| LAND & SUPPLIES                |                 | 22982.50  | 0.46                | 5.13             |
| TOTAL INVESTMENT               |                 | 359153.25 | 7.16                | 80.11            |
| EQUITY                         | 100.00 %        | 359153.25 | 7.16                | 80.11            |
| MANAGEMENT:                    |                 |           |                     |                  |
| YEARS OF TRKY FARMING          | 18.75           |           |                     |                  |
| NUMBER OF FLOCKS               | 5.75            |           |                     |                  |
| TOTAL KG SOLD                  | 448312.50       |           |                     |                  |
| GRADE A UTILIZATION            | 77.98 %         |           |                     |                  |
| ANNUAL PRODUCTIVITY            | 46104.00 BIRDS  |           |                     |                  |
| HOURS PER BIRD                 | 0.11            |           |                     |                  |
| FEED CONVERSION FACTOR         | 3.28            |           |                     |                  |
| INVESTMENT PER BIRD            | 8.40            |           |                     |                  |
| MORTALITY ESTIMATE             | 23.46 %         |           |                     |                  |
| PERCENTAGE CONDEMNED           | 2.15 %          |           |                     |                  |
| DAYS TO MARKET - HENS          | 122.28          |           |                     |                  |
| DAYS TO MARKET - TOMS          | 141.06          |           |                     |                  |



## APPENDIX B



## HIGH MANAGEMENT

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG. |
|--------------------------------|-----------------|-----------|---------------------|------------------|
| BIRD SALES                     | 18607.25 BIRDS  |           |                     |                  |
| HENS                           |                 | 138601.81 | 7.45                | 82.15            |
| TOMS                           |                 | 96175.56  | 5.17                | 57.01            |
| PRIVATE SALES & OTHER RECEIPTS |                 | 2945.04   | 0.16                | 1.75             |
| INVENTORY ADJUSTMENT           |                 | 1312.44   | 0.07                | 0.78             |
| A. GROSS INCOME                |                 | 239034.81 | 12.85               | 141.68           |
| POULT COSTS - HENS             | 1.21 \$/POULT   | 17830.22  | 0.96                | 10.57            |
| POULT COSTS - TOMS             | 1.36 \$/POULT   | 8057.57   | 0.43                | 4.78             |
| FEED COSTS - HENS              | 274.83 \$/TONNE | 81875.12  | 4.40                | 48.53            |
| FEED COSTS - TOMS              | 260.10 \$/TONNE | 54621.11  | 2.94                | 32.38            |
| MEDICATION                     |                 | 925.55    | 0.05                | 0.55             |
| BARN SUPPLIES                  |                 | 1570.31   | 0.08                | 0.93             |
| MARKETING FEES & FREIGHT       |                 | 7486.23   | 0.40                | 4.44             |
| FUEL, OIL, LUBE                |                 | 82.50     | 0.00                | 0.05             |
| UTILITIES                      |                 | 5549.23   | 0.30                | 3.29             |
| MACHINERY & BUILDING REPAIRS   |                 | 4506.85   | 0.24                | 2.67             |
| OPERATING INTEREST             |                 | 1676.39   | 0.09                | 0.99             |
| OTHER EXPENSES                 |                 | 3959.36   | 0.21                | 2.35             |
| HIRED LABOUR                   | 767.77 HOURS    | 5586.70   | 0.30                | 3.31             |
| FAMILY LABOUR                  | 1039.25 HOURS   | 6982.25   | 0.38                | 4.14             |
| LABOUR COSTS                   | 6.96 \$/HOUR    | 12568.95  | 0.68                | 7.45             |
| B. TOTAL VARIABLE COSTS        |                 | 200719.31 | 10.79               | 118.97           |
| INSURANCE AND TAXES            |                 | 1543.73   | 0.08                | 0.92             |
| RENT                           |                 | 84.38     | 0.00                | 0.05             |
| DEPRECIATION                   |                 | 7133.29   | 0.38                | 4.23             |
| INTEREST (CAPITAL LOANS)       | 13.71 %         | 927.70    | 0.05                | 0.55             |
| C. TOTAL CAPITAL COSTS         |                 | 9689.10   | 0.52                | 5.74             |
| D. PRODUCTION COSTS (B+C)      |                 | 210408.37 | 11.31               | 124.71           |
| GROSS MARGIN (A-B)             |                 | 38315.50  | 2.06                | 22.71            |
| RETURN TO EQUITY (A-D)         | 38.14 %         | 28626.42  | 1.54                | 16.97            |
| INVESTMENT:                    |                 |           |                     |                  |
| BUILDINGS                      | 17.03 YEARS     | 52232.03  | 2.81                | 30.96            |
| MACHINERY                      | 9.56 YEARS      | 23301.19  | 1.25                | 13.81            |
| LAND & SUPPLIES                |                 | 6283.75   | 0.34                | 3.72             |
| TOTAL INVESTMENT               |                 | 81816.94  | 4.40                | 48.49            |
| EQUITY                         | 91.73 %         | 75048.19  | 4.03                | 44.48            |
| MANAGEMENT:                    |                 |           |                     |                  |
| YEARS OF TRKY FARMING          | 14.75           |           |                     |                  |
| NUMBER OF FLOCKS               | 2.25            |           |                     |                  |
| TOTAL KG SOLD                  | 168713.25       |           |                     |                  |
| GRADE A UTILIZATION            | 75.41 %         |           |                     |                  |
| ANNUAL PRODUCTIVITY            | 17466.00 BIRDS  |           |                     |                  |
| HOURS PER BIRD                 | 0.10            |           |                     |                  |
| FEED CONVERSION FACTOR         | 3.09            |           |                     |                  |
| INVESTMENT PER BIRD            | 4.63            |           |                     |                  |
| MORTALITY ESTIMATE             | 11.11 %         |           |                     |                  |
| PERCENTAGE CONDEMNED           | 1.86 %          |           |                     |                  |
| DAYS TO MARKET - HENS          | 122.83          |           |                     |                  |
| DAYS TO MARKET - TOMS          | 137.88          |           |                     |                  |

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG. |
|--------------------------------|-----------------|-----------|---------------------|------------------|
| BIRD SALES                     | 31958.83 BIRDS  |           |                     |                  |
| HENS                           |                 | 177083.81 | 5.54                | 59.66            |
| TOMS                           |                 | 236377.50 | 7.40                | 79.64            |
| PRIVATE SALES & OTHER RECEIPTS |                 |           |                     |                  |
| INVENTORY ADJUSTMENT           |                 | 653.39    | 0.02                | 0.22             |
| A. GROSS INCOME                |                 | 414114.81 | 12.96               | 139.52           |
| POULT COSTS - HENS             | 1.21 \$/POULT   | 32334.64  | 1.01                | 10.89            |
| - TOMS                         | 1.30 \$/POULT   | 14943.26  | 0.47                | 5.03             |
| FEED COSTS - HENS              | 248.31 \$/TONNE | 104094.94 | 3.26                | 35.07            |
| - TOMS                         | 229.31 \$/TONNE | 130187.25 | 4.07                | 43.86            |
| MEDICATION                     |                 | 523.87    | 0.02                | 0.18             |
| BARN SUPPLIES                  |                 | 3017.17   | 0.09                | 1.02             |
| MARKETING FEES & FREIGHT       |                 | 10299.11  | 0.32                | 3.47             |
| FUEL, OIL, LUBE                |                 | 1901.60   | 0.06                | 0.64             |
| UTILITIES                      |                 | 13673.41  | 0.43                | 4.61             |
| MACHINERY & BUILDING REPAIRS   |                 | 7028.28   | 0.22                | 2.37             |
| OPERATING INTEREST             |                 | 2649.58   | 0.08                | 0.89             |
| OTHER EXPENSES                 |                 | 5881.13   | 0.18                | 1.98             |
| HIRED LABOUR                   | 2352.50 HOURS   | 16983.76  | 0.53                | 5.72             |
| FAMILY LABOUR                  | 1310.00 HOURS   | 7740.50   | 0.24                | 2.61             |
| LABOUR COSTS                   | 6.75 \$/HOUR    | 24724.26  | 0.77                | 8.33             |
| B. TOTAL VARIABLE COSTS        |                 | 351258.31 | 10.99               | 118.34           |
| INSURANCE AND TAXES            |                 | 4810.14   | 0.15                | 1.62             |
| RENT                           |                 |           |                     |                  |
| DEPRECIATION                   |                 | 19491.85  | 0.61                | 6.57             |
| INTEREST (CAPITAL LOANS)       | 11.26 %         | 3024.48   | 0.09                | 1.02             |
| C. TOTAL CAPITAL COSTS         |                 | 27326.46  | 0.86                | 9.21             |
| D. PRODUCTION COSTS (B+C)      |                 | 378584.62 | 11.85               | 127.55           |
| GROSS MARGIN (A-B)             |                 | 62856.47  | 1.97                | 21.18            |
| RETURN TO EQUITY (A-D)         | 15.90 %         | 35530.02  | 1.11                | 11.97            |
| INVESTMENT:                    |                 |           |                     |                  |
| BUILDINGS                      | 12.67 YEARS     | 185122.00 | 5.79                | 62.37            |
| MACHINERY                      | 7.16 YEARS      | 48766.82  | 1.53                | 16.43            |
| LAND & SUPPLIES                |                 | 16464.75  | 0.52                | 5.55             |
| TOTAL INVESTMENT               |                 | 250353.62 | 7.83                | 84.35            |
| EQUITY                         | 89.27 %         | 223483.81 | 6.99                | 75.30            |
| MANAGEMENT:                    |                 |           |                     |                  |
| YEARS OF TRKY FARMING          | 18.17           |           |                     |                  |
| NUMBER OF FLOCKS               | 4.00            |           |                     |                  |
| TOTAL KG SOLD                  | 296809.31       |           |                     |                  |
| GRADE A UTILIZATION            | 67.77 %         |           |                     |                  |
| ANNUAL PRODUCTIVITY            | 31390.66 BIRDS  |           |                     |                  |
| HOURS PER BIRD                 | 0.12            |           |                     |                  |
| FEED CONVERSION FACTOR         | 3.08            |           |                     |                  |
| INVESTMENT PER BIRD            | 8.17            |           |                     |                  |
| MORTALITY ESTIMATE             | 17.89 %         |           |                     |                  |
| PERCENTAGE CONDEMNED           | 1.57 %          |           |                     |                  |
| DAYS TO MARKET - HENS          | 121.52          |           |                     |                  |
| - TOMS                         | 141.49          |           |                     |                  |

## LOW MANAGEMENT

## HEAVY TURKEY COSTS AND RETURNS

|                                |                 | TOTAL     | DOLLARS<br>PER BIRD | CENTS<br>PER KG |
|--------------------------------|-----------------|-----------|---------------------|-----------------|
| BIRD SALES                     | 27562.33 BIRDS  |           |                     |                 |
| HENS                           |                 | 182390.25 | 6.62                | 86.83           |
| TOMS                           |                 | 128325.00 | 4.66                | 61.09           |
| PRIVATE SALES & OTHER RECEIPTS |                 | 43.33     | 0.00                | 0.02            |
| INVENTORY ADJUSTMENT           |                 | 4446.66   | 0.16                | 2.12            |
| A. GROSS INCOME                |                 | 315205.25 | 11.44               | 150.05          |
| POULT COSTS - HENS             | 1.12 \$/POULT   | 23072.50  | 0.84                | 10.98           |
| - TOMS                         | 1.13 \$/POULT   | 16216.33  | 0.59                | 7.72            |
| FEED COSTS - HENS              | 280.31 \$/TONNE | 176654.81 | 6.41                | 84.10           |
| - TOMS                         | 227.72 \$/TONNE | 29596.48  | 1.07                | 14.09           |
| MEDICATION                     |                 | 1586.33   | 0.06                | 0.76            |
| BARN SUPPLIES                  |                 | 2276.67   | 0.08                | 1.08            |
| MARKETING FEES & FREIGHT       |                 | 9143.61   | 0.33                | 4.35            |
| FUEL, OIL, LUBE                |                 | 1494.33   | 0.05                | 0.71            |
| UTILITIES                      |                 | 11401.16  | 0.41                | 5.43            |
| MACHINERY & BUILDING REPAIRS   |                 | 4493.66   | 0.16                | 2.14            |
| OPERATING INTEREST             |                 | 7502.68   | 0.27                | 3.57            |
| OTHER EXPENSES                 |                 | 7777.32   | 0.28                | 3.70            |
| HIRED LABOUR                   | 1680.67 HOURS   | 17820.00  | 0.65                | 8.48            |
| FAMILY LABOUR                  | 423.67 HOURS    | 2600.67   | 0.09                | 1.24            |
| LABOUR COSTS                   | 9.70 \$/HOUR    | 20420.66  | 0.74                | 9.72            |
| B. TOTAL VARIABLE COSTS        |                 | 311636.56 | 11.31               | 148.35          |
| INSURANCE AND TAXES            |                 | 2845.93   | 0.10                | 1.35            |
| RENT                           |                 |           |                     |                 |
| DEPRECIATION                   |                 | 14550.48  | 0.53                | 6.93            |
| INTEREST (CAPITAL LOANS)       | 10.80 %         | 1681.33   | 0.06                | 0.80            |
| C. TOTAL CAPITAL COSTS         |                 | 19077.74  | 0.69                | 9.08            |
| D. PRODUCTION COSTS (B+C)      |                 | 330714.25 | 12.00               | 157.43          |
| GROSS MARGIN (A-B)             |                 | 3568.69   | 0.13                | 1.70            |
| RETURN TO EQUITY (A-D)         | -6.50 %         | -15509.02 | -0.56               | -7.38           |
| INVESTMENT:                    |                 |           |                     |                 |
| BUILDINGS                      | 2.61 YEARS      | 200469.62 | 7.27                | 95.43           |
| MACHINERY                      | 3.16 YEARS      | 39303.87  | 1.43                | 18.71           |
| LAND & SUPPLIES                |                 | 14468.33  | 0.52                | 6.89            |
| TOTAL INVESTMENT               |                 | 254239.87 | 9.22                | 121.03          |
| EQUITY                         | 93.88 %         | 238673.19 | 8.66                | 113.62          |
| MANAGEMENT:                    |                 |           |                     |                 |
| YEARS OF TRKY FARMING          | 3.67            |           |                     |                 |
| NUMBER OF FLOCKS               | 3.33            |           |                     |                 |
| TOTAL KG SOLD                  | 210064.69       |           |                     |                 |
| GRADE A UTILIZATION            | 71.39 %         |           |                     |                 |
| ANNUAL PRODUCTIVITY            | 23695.66 BIRDS  |           |                     |                 |
| HOURS PER BIRD                 | 0.09            |           |                     |                 |
| FEED CONVERSION FACTOR         | 3.63            |           |                     |                 |
| INVESTMENT PER BIRD            | 13.58           |           |                     |                 |
| MORTALITY ESTIMATE             | 25.36 %         |           |                     |                 |
| PERCENTAGE CONDEMNED           | 3.31 %          |           |                     |                 |
| DAYS TO MARKET - HENS          | 118.63          |           |                     |                 |
| - TOMS                         | 136.47          |           |                     |                 |